

Landowner Letter

DIVISION OF FISH & WILDLIFE

2011









Red-headed Woodpecker

An endangered species in Delaware, the Redheaded Woodpecker has declined significantly in the state due to habitat loss. It prefers dead bark-less trees along wood edges and open areas. Populations often decrease in areas where forests mature and become dense.

One of the more aggressive birds in its family, the Red-headed Woodpecker is Delaware's most omnivorous woodpecker. Foods include beech and oak seeds, berries, seeds, nuts, fruit, insects, bird eggs and nestlings, and mice.

Interesting Fact:

The Red-headed Woodpecker will often store insects as a hidden food source for later!

A Breath of Fresh Air The Value of Delaware's Forests

Forests provide 30% of the wildlife habitat in Delaware. The majority of the state's forested areas are fragmented into small woodlots due to private and commercial development, agriculture and road systems. It is important to maintain Delaware's forested lands by re-connecting fragments and

Fresh Air to Breathe!

Did you know?

In one year, the

average tree can

absorb 26

pounds of

carbon dioxide

and produce

enough oxygen

to keep a family

of 4 breathing

for a year!

Forests are often called the "lungs of the earth" because trees and plants take in the carbon dioxide that humans and animals breathe out and then produce oxygen for us to breathe in.

A Self-sustaining Ecosystem

re-establishing habitat for wildlife. After all, our forests do so much for us!

Forest plants play a key role in enriching the soil by recycling nutrients through the shedding of leaves and seeds. These plant parts decompose on the forest floor—putting nutrients right back into the ground to be used again!

Let it Rain!

Trees evaporate water back into the atmosphere to increase rainfall. Depending upon conditions, a single tree can evaporate thousands of liters of water into the atmosphere to increase local precipitation!

Flood Control

Tree roots create gaps in the soil so rain water has space

to move around before being absorbed. Soil becomes compacted without these roots, causing water to run right over it and not be absorbed.

> Spring is a great time to plant trees! Contact a LIP biologist to learn more.



Delaware Landowner **Incentive Program Biologists**

Bill Jones

William.Jones @ state.de.us 302-284-4795

Jason Davis

Jason.Davis@state.de.us 302-735-3600

DE Landowner Incentive Program DE Division of Fish & Wildlife 6180 Hay Point Landing Smyrna, DE 19977 40 50202

Have you seen me?

Eastern Box Turtles

One of the most popular and recognizable turtles in Delaware, the Eastern Box Turtle is a favorite among wildlife lovers. However, habitat destruction and pet collection are making this turtle harder to find.

Box Turtle Basics

- Most easily identified by a high domed shell with yellow/orange markings.
- Shells are hinged underneath to allow the turtle to pull its arms, legs, and head inside. It is the only turtle in Delaware that can completely close its shell!
- Habitat—forests, fields, occasionally marshes, bogs and vernal pools
- Food—Box Turtles are omnivores and will eat nearly anything! Young Box Turtles prefer insects and slugs.
- Hibernation—Box Turtles will burrow into the soil to hibernate during the winter.

An Uncertain Future

Box Turtles, once common throughout their range in Delaware, are now mostly found in isolated patches of forest surrounded by roads or development..

Box Turtles as Pets

Box Turtles require special care and often die when collected as pets. Returning a turtle to the wild after captivity can cause the turtle to become disoriented and struggle to find the resources it needs to survive. Re-introduced turtles also have the potential to spread new diseases to wild turtles.

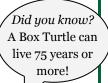
Fragmented Habitat

Human activities like development, roads and agriculture often fragment, or break up wildlife habitats. A Box Turtle's home range (the area it travels within for food, water and shelter) only stretches about 500 feet diameter. If it is removed or displaced from its home range, the turtle could have difficulty finding the food, water, shelter and hibernating locations it used to know how to find.

What Can You Do?

- Maintain wooded, wet or grassy habitats. Connect forested or grassland corridors to create continuous habitat for Box Turtles (and other wildlife!).
- Leave them in the wild! If you find a box turtle on your property, leave it where you find it. Remember they only have a small home range so you may see it again!
 - If you notice a Box Turtle crossing the road, it is ok to move it to the shoulder out of harm's way. If possible, place it in the same direction it was originally heading.









Delaware's Breeding Bird Atlas

How to Report Breeding Bird Activity on Your Property



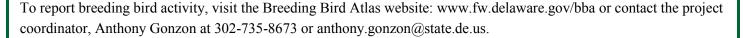
The Delaware Breeding Bird Atlas (BBA) is a five year study (2008-2012) of the distribution of breeding birds found in Delaware. This is the second breeding bird atlas compiled in Delaware (the first completed during 1983-1987). As land use in Delaware has changed over the past several decades, much of the state's wildlife habitat has been altered. The second Breeding Bird Atlas will provide important information about the current bird activity in the state and will allow biologists to make comparisons with the original atlas results.

The BBA has volunteers statewide surveying and reporting breeding bird activity. There are several bird species, however, that nest in cavities in or near buildings and structures on private property where volunteers are not able to survey. If you find breeding birds on your property,

you can provide valuable data for the BBA.

Two cavity-nesting birds to look for:

- 1. Chimney Swifts—Chimney Swifts breed from May 20 through July 15. They are small brown cigar-shaped birds that commonly nest in chimneys of older houses. If you notice small brown birds flying in and out of your chimney, or hear the sound of baby birds in your chimney during this time period, these may be nesting Chimney Swifts!
- 2. Barn Owl—Barn Owls breed from April 1 through August 1 in natural or man-made cavities (trees, buildings, silos, etc.). Generally these nocturnal raptors prefer nesting areas near the Delaware Bay and/or its marshes. A good indicator of owl activity is owl pellets (regurgitated balls of fur and bones) on the ground.



Can Plants Become Resistant to Herbicides?

Yes! The widespread use of herbicides to eradicate unwanted plants has caused some species to build up a resistance. Species such as marestail (horseweed), red root pigweed, lambs quarters (goosefoot), and common ragweed have been known to build up herbicide resistance. Having trouble getting rid of unwanted or invasive plants with herbicide? Here are some things you can do!

- 1. *Switch Herbicides Every 2-3 Years*—Check your herbicide container to see if it has rotational suggestions or restrictions.
- 2. *Manual Removal Methods*—Many weedy or invasive plants can be controlled by mowing, cutting or hand pulling.
- 3. *Investigate!* —Some plants can be eradicated by other more species-specific methods such as shading out with a tarp. Research your unwanted plant species and/or contact a LIP biologist to find out what methods you can use for control.





Prescribed Burning

Maintaining Grasslands with Fire

Successful management of grassland (early successional) habitats can be accomplished by using a variety of techniques. Herbicides, vegetation plantings, disking, mowing, chain sawing, and seeding all have their roles devoted to one goal, a healthy functioning ecosystem. Although these methods are useful and somewhat desperately needed, they can be labor intensive. One of the most cost and time-effective methods for managing wildlife habitat is prescribed burning.

Controlling Plant Succession

Prescribed burning is the best method for controlling the natural succession (growth) of woody plants in a grassy field or meadow. Burning can also help maintain a healthy ecosystem by:

- stimulating the germination of beneficial plant seeds
- removing the buildup of leaves and organic material from the top layer of soil
- reducing the spread of plant diseases
- releasing nutrients from dead organic material
- reducing the amount of debris that could catch fire in a wildfire
- occasionally, it is also beneficial to burn thick standing vegetation before herbicide treatment

Burning Conditions

There are many factors involved in a successful prescribed burn. Fire behavior plays an integral role in determining how you plan your burn. Environmental factors such as wind speed, humidity, temperature, soil moisture, rainfall, fuel (vegetation) moisture, air mass stability, and topography need to be carefully considered before setting a fire. The local fire department and police need to be included in the evaluation process as well.

The Delaware Forest
Service (DFS) has a
prescribed fire program
aimed at assisting private
landowners with forest
and wildlife habitat
management. They are
available to conduct a
prescribed burn for a fee
on private lands.



Safety First! Burning can be a useful tool when done properly, but can be life threatening if not conducted by a trained professional.

Planning a Prescribed Burn

There are a few required steps to follow when planning a prescribed burn.

- 1. An application for prescribed burning must be filled out and sent to the Air Quality Management Section of DNREC.
- 2. Goals must be set and a burn plan must be drawn out.
- 3. Once a plan is constructed and all regulatory measures are fulfilled, the burn can be performed by qualified professionals.



For more information on prescribed burns contact: DNREC: Air Quality Management Section 302-739-3106 Dept. of Agriculture: Delaware Forest Service 302-698-4548